

Date: Wednesday, 6/27/2007 1:07:19 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEP STRUT
Job Number : 33208	
Estimate Number : 11941	
P.O. Number : <i>N/A</i>	Part Number : D2017129
This Issue : 6/27/2007 S.O. No. : <i>N/A</i>	Drawing Number : D2017 REV E1
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i>	Drawing Revision : E1
Previous Run : <i>N/A</i>	Material : <i>N/A</i>
Written By : _____	Due Date : 7/10/2007 Qty: 6 Um: Each
Checked & Approved By : <i>[Signature]</i> 07.06.28	
Comment : Est F 02.06.19 Update processes (Ref. ECN 435) KJ	

## Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

M304TR0750W049

304 RD Tube .750 x .049W



Comment: Qty.: 2.7738 f(s)/Unit Total: 16.6427 f(s)

Punch tube type 304-2B, 3/4" Ø. X .049" wall to length per Dwg. D2017 &amp; spec control D2638

Batch No. *M104862**FF 07-07-06 6*

Deburr

*SAD 07/07/06 (6)*

2.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*07-07-09 (46)*

3.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref. 4.3.5.2) as per QSI 005 4.3

*BR**07-07-10**(6)*

4.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*07/27/11 (6)*

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *57208**07/27/11 (6)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: D Date: 02/02/12  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP STRUT

Job Number: 33208

Part Number: D2017129

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(E)

Comment: FINAL INSPECTION/W/O RELEASE

*2010212*

Job Completion



*u 57-5712*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

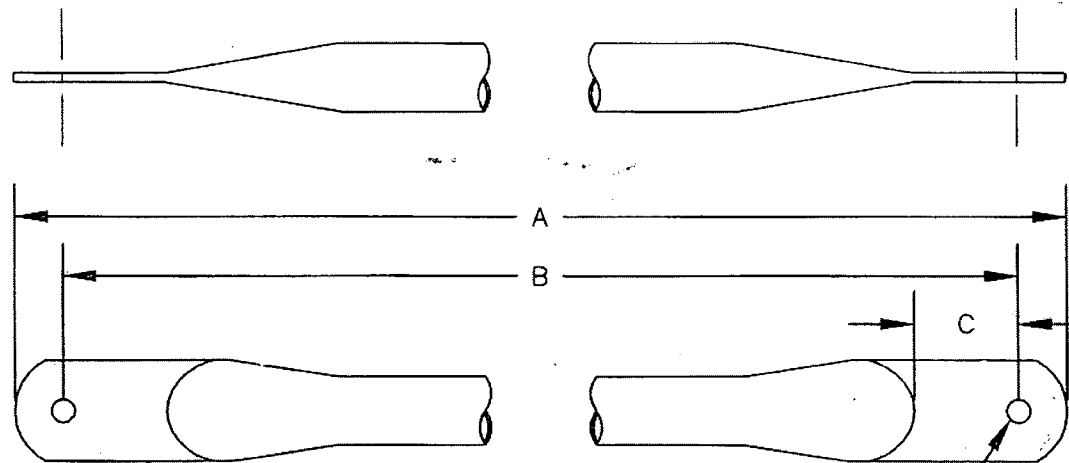
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



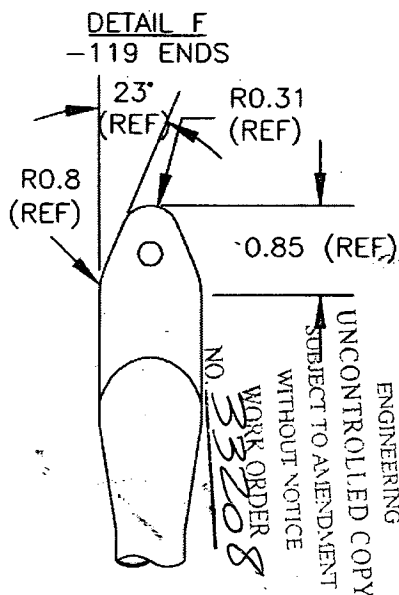
RELEASED  
99.05.11 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
KE	RF	D2017
DATE	TITLE	REV. E
99.04.16	STEP STRUTS	SHEET 1 OF 2
		SCALE
		NIS
C	95.01.26	ADDED PARTS
D	96.03.28	ADD PARTS
E	99.04.16	ENDS PUNCHED PER SPEC CTRL: -119 CHANGE (TSR A897)
E1	02.03.22	ADD FINISH



PUNCH ENDS PER  
SPEC CTRL D2638  
(-119 SEE NOTE)

"D" DIA 0.25 TO BE PUNCHED (TYP. BOTH ENDS)  
"E" DIA TO BE OPENED MANUALLY (ONE END ONLY)



Part Number	A	B	C	D	E
D2017-101	17.73	16.93	1.30	0.250	0.312
D2017-103	18.74	17.94	1.30	0.250	0.312
D2017-105	14.95	14.15	1.30	0.250	-
D2017-107	15.61	14.81	1.30	0.250	-
D2017-109	13.93	13.13	1.30	0.250	-
D2017-111	15.30	14.50	1.30	0.250	-
D2017-113	20.50	19.70	1.30	0.250	0.312
D2017-115	12.42	11.62	1.30	0.250	-
D2017-117	13.86	13.06	1.30	0.250	-
D2017-119	26.75	25.95	1.30	0.250	-
D2017-121	12.30	11.50	1.30	0.250	-
D2017-123	12.92	12.12	1.30	0.250	-
D2017-125	19.55	18.75	1.30	0.250	-
D2017-127	20.30	19.50	1.30	0.250	-
D2017-129	31.43	30.63	1.30	0.250	-
D2017-131	19.68	18.88	1.30	0.250	-
D2017-133	30.66	29.86	1.13	0.250	-

NOTE:

FOR D2017-119: PUNCH PER D2638, GRIND ENDS PER DT8360 (SEE DETAIL F FOR REF.)  
BEND FLARED ENDS 8° UP/ 8° DOWN

MATERIAL: 304/316/318 SS, 0.75 OD x 0.049 WALL, ENSURE SEAMLESS TUBING IS USED  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

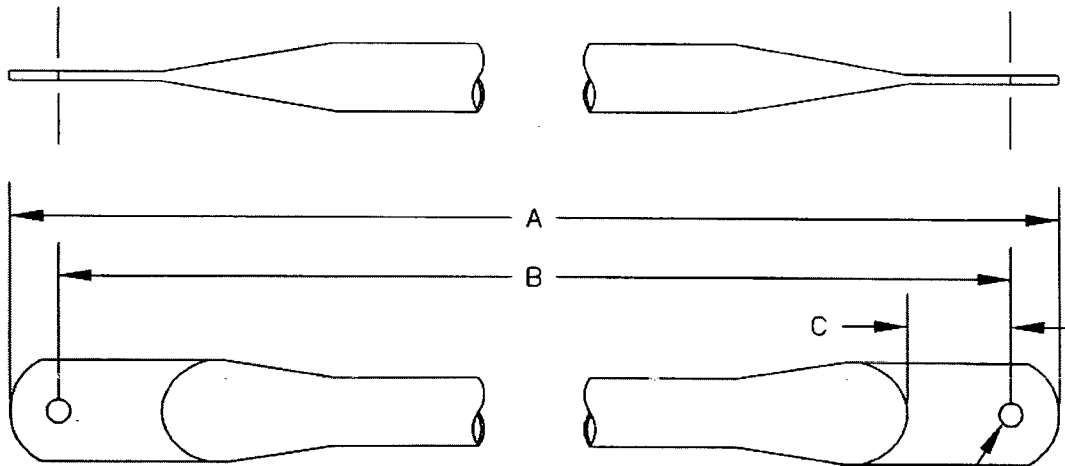
FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 / E1

**DART**



DESIGN BW	DRAWN BY RT	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	
CHECKED KE	APPROVED RT	DRAWING NO. D2017	REV. E
DATE 99.04.16	TITLE STEP STRUTS	SHEET 2 OF 2	
		SCALE NTS	

RELEASED  
99.05.11 KE



"D" DIA 0.25 TO BE PUNCHED (TYP. BOTH ENDS)

Part Number	A	B	C	D
D2017-201	21.31	20.51	1.30	0.250
D2017-203	16.39	15.59	1.30	0.250
D2017-205	16.53	15.73	1.30	0.250
D2017-207	13.85	13.05	1.30	0.250
D2017-209	15.64	15.33	1.30	0.250
D2017-211	15.67	14.87	1.30	0.250
D2017-213	15.82	15.02	1.30	0.250
D2017-215	16.47	15.67	1.30	0.250
D2017-217	16.70	15.90	1.30	0.250
D2017-219	13.65	12.85	1.30	0.250
D2017-221	13.58	12.78	1.30	0.250
D2017-223	12.95	12.15	1.30	0.250
D2017-225	13.99	13.19	1.30	0.250
D2017-227	30.67	29.87	1.30	0.250

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WITHOUT NOTICE  
WORK ORDER  
NO. 33208

**NOTE:**

MATERIAL: 304/316/318 SS, 0.75 OD x 0.049 WALL, ENSURE SEAMLESS TUBING IS USED  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

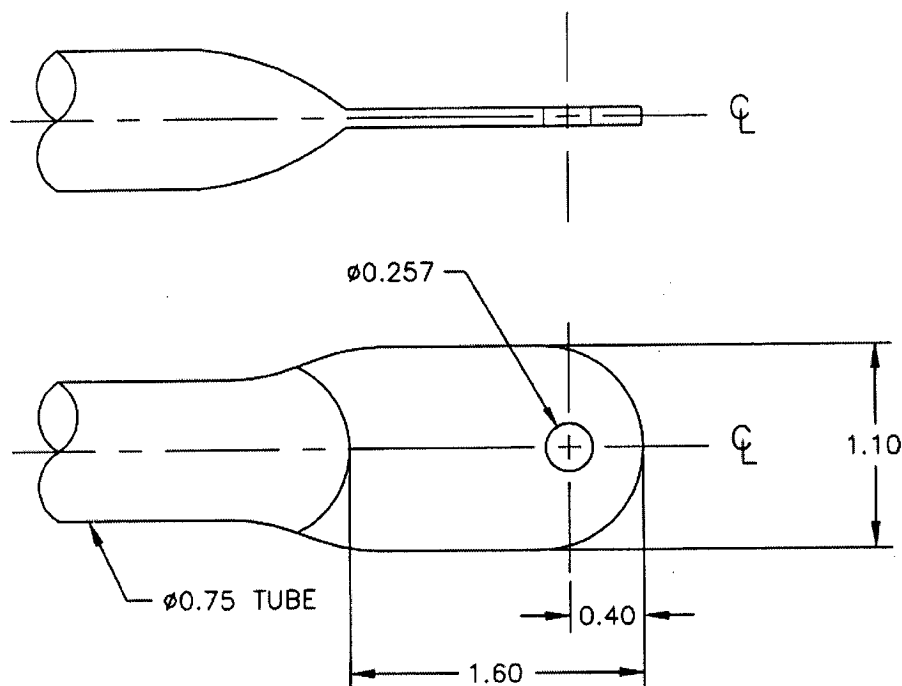
FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3/ET



DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>ME</i>	APPROVED <i>KE</i>	DRAWING NO. D2638	REV. A SHEET 1 OF 1
DATE 98.04.28		TITLE PUNCH DT8117 SPEC CONTROL	SCALE 1:1
A	98.04.28	NEW ISSUE	

RELEASED  
98/05/05 KE

## SPECIFICATION CONTROL DRAWING FOR PUNCH DT8117



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